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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,847	10/05/2000	Burton A Hipp	A-69622/DCA/JWC	2168

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EXAMINER

MOSLEHI, FARHOOD

ART UNIT

PAPER NUMBER

2126

DATE MAILED: 09/15/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/680,847	Applicant(s) HIPP, BURTON A
	Examiner	Art Unit
	Farhood Moslehi	2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 15 October 2000 .

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-6 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 05 October 2000 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 . 6) Other: _____ .

Serial Number: 09/680847

Art Unit 2126

DETAILED ACTION

Drawings

1. The drawings are objected to because there is not enough paper-margin from the top of the pages of all drawings; hence portions of the drawings are not legible. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 250 and 254. In addition there are a number of other references mentioned in specification that are not present in the figures. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to because there are a number of crossed out references without proper initials. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Belsan et al. (5403639) (hereinafter Belsan).
6. As per claim 1, Belsan shows in a computer system, a method savings a running software application for execution at a later time, the application being associated with a process having a state and an environment, comprising the steps of:

Associating a unique identifier with a running software application to be saved (e.g. col. 34, lines 55-60);

virtualizing the process environment associated with said running software application (e.g. col. 8, lines 20-30 and col. 15, lines 35-40);

recording process events that change the state of the process (e.g. col. 7, lines 42-48);

saving process state in the form of a snapshot image (e.g. col. 2, lines 24-34);

saving shared resources state relevant to said snapshot image with said snapshot image (e.g. col. 3, lines 11-19).

7. As per claim 5, it is rejected for similar reasons as stated above.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 4 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al. (6,442,663) (hereinafter Sun).

10. As per claim 4, Sun shows a method of restoring to a running state a software application stored in a running state with necessary processes, process state information, memory information, and dependency information, comprising the steps of:

matching said stored software application with an application identifier (e.g. col.1, lines 57-68);

locating all stored processes stored with said software application (e.g. col. 2, lines 32-38);

recreating global/shared state (e.g. col. 2, lines 40-45);

creating a process that inherits the global/shared state (e.g. col. 2, lines 60-67);

isolating the global/shared state process from other processes (e.g. col. 3, lines 1-7);

for each type of state stored within the stored software application, bind system state to a virtual definition if the state is virtualized, reconnect the state to any

processes the state is shared with, and place the state in a synchronized wait (e.g. col. 2, lines 52-58);
removing traces and states included (e.g. col. 4, lines 35-39);
performing a synchronized resume of all processes (e.g. col. 7, lines 24-31).

11. As per claim 6, it is rejected for similar reasons as stated above.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belsan in view of Sun.

As per claim 2, Belsan does not teach the step of saving modified memory pages relevant to said snapshot image with said snapshot image. Sun teaches the step of saving modified memory pages relevant to said snapshot image with said snapshot image (e.g. Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Belsan with Sun because it would provide the means to save modified memory pages, in order to save the pages relevant to the snapshot image.

14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belsan in view of Biegel et al. (5,608,720) (hereinafter Biegel).

15. As per claim 3, Belsan does not teach the step of saving states associated multiple threads relevant to said snapshot image. Biegel teaches the use of states associated with multiple threads (e.g. col. 40, lines 6-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Belsan with Biegel, because it would provide associated multiple threading functionality in order to save associated multiple thread states relevant to the snapshot image.

Conclusion

16. The following patents are cited to further show the state pertinent to applicant's disclosure.

US 6,324,690 to Luu

US 6,363,421 to Baker et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farhood Moslehi whose telephone number is 703-305-8646. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 703-305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305 9600.

Farhood Moslehi

September 4, 2003.

fm



JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
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